Name – Manav Sharma

Roll – No. – 1911981090

Email – Manavsharma.cse19@chitkarauniversity.edu.in

TASK – 1

Creating a Test Plan involves the following steps:

Product Analysis : In product Analysis we focus on the type of product we are testing .

- ➔ In our case this is a market place website .
- ➔ Our end users are gonna use the website for buying / selling items .
- ➔ Main purpose of our website is to be a digital market .
- ➔ What kind of servers and hardwares we require .

Designing Test Strategy : In test strategy we focus on how , what , when and by whom the features are going to be tested .

Two types of testing .

Manual Testing : where an experienced individual with deep knowledge and end user prospective will test the application , this includes (black box testing and white box testing).

Automation Testing : Where an individual with scripting and framework knowledge will test with help of scripts to implement   test cases as fast as possible .

Since we are testing on a marketplace website , we should focus on :

Unit testing : white box testing .

Integration testing : Black box testing .

Api testing which is part of integration testing : Analyzes an application program interface (API) to verify it fulfills its expected functionality, security, performance and reliability.

System Testing .

Defining Objectives: In objectives we mainly discuss why we are testing the software , what are the reasons . What goals we want to accomplish by testing the software .

-> Since our marketplace is an consumer end website , we must check all the functionality before rolling out the application to make the customer experience as smooth as possible .

This includes :

Testing GUI to see if there is **no glitch .**

Checking all the functionality for smooth customer experience .

Checking the performance standards Like :

Status of item is being updated as soon as transaction is being done .

No lags , crash or bugs causing systems to throttle .

Also one of the main objective will be to achieve the standard benchmark for every functionality .

Establish Test Criteria : In test criteria we mainly focus on the minimum benchmark to be achieved or the test will be suspended .

Suspension Criteria : While testing our marketplace and running tests , if we get an error or only 50 percent of the test cases pass . Than we have to suspend the testing and let developers fix the bugs .

Exit Criteria : While testing our marketplace and running tests , if we see that our 80 percent of the test cases are passed than according to governing standards the functionality is ok for public use . Although we should always try to achieve 100 percent test cases .

Planning Resource Allocation : In this we specify the requirements of resources required for successfully testing the functionalities .

This includes :

Number of team members (Depends upon the type of Functionalities we are checking).

Hardwares and tools : Mainly specifies the sandbox environments we require while testing and tools like Selenium to automate the process .

Planning Setup of Test Environment: In this we manily focus on determining on what kind of devices are our applications gonna be used on .

➔ Since our marketplace website is gonna be available on a real browser with all the updates and functionality , it is important as an tester to test our website on real devices .

➔ This will give us an end user prospective on how our users gonna be experience our website and how we as a provider want them to use our product . It is an really important part of testing .

Determine test schedule and estimation : In this we focus on distributing the tasks in smaller segments and finishing the tasks before the deadlines .

➔ Since our marketplace needs to be roll out in 6 months , we have to distribute the tasks in segments where each required functionality can be tested in required time and with efficiency .

Key factors : Employee availability .

Number of working days .

Number of functionality to be tested .

Risk factor : Deadlines , affects on customer experience etc .

Establish Test Deliverables: In this we basically refers to the list of deliverables required before , during and after the testing have been done .

This includes:

Before Testing :

Test plan : How we are gonna implement the test plan for our marketplace .

Test design : How the test is designed to check the functionalities in order .

During Testing :

Test Scripts : what scripts are used for the purpose of the testing .

Simulators and emulators : What kind of devices were used for testing example sandboxes etc .

Test Data : This includes the data accumulated during the testing phase .

Error and execution logs : The logs and data generated for errors during the testing .

After Testing :

 Test Results : This includes the results of the tests which were conducted .

Defect Reports : This includes list / bugs of the defected functionalities .

Release Notes : This basically includes the documentation which is released with an new update which basically includes   the data of what was updated and what new features were added / removed and what bugs were fixed .